



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,986	07/25/2001	Rajarshi Das	YOR920010349US1	8166

7590 05/09/2005

Duke W. Yee,  
Carstens, Yee & Cahoon, LLP  
P.O. Box 802334  
Dallas, TX 75380

EXAMINER
----------

DASS, HARISH T

ART UNIT	PAPER NUMBER
----------	--------------

3628

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/915,986	<b>Applicant(s)</b> DAS ET AL.	
	<b>Examiner</b> Harish T Dass	<b>Art Unit</b> 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 and 46-49 is/are rejected.
- 7) ☒ Claim(s) 45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/15/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural

Art Unit: 3628

phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the

Art Unit: 3628

"technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a

Art Unit: 3628

§101 rejection finding the claimed invention to be non-statutory. See Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, Claims 1-19 have no connection to the technological arts. None of the steps indicate any connection to a computer or technology.

Therefore, the claims are directed towards non-statutory subject matter. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts.

### ***Claim Objections***

Claim 45 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3628

Claims 1-9, 12-29, 32-42, 44, 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macready et al (hereinafter Macready – PG PUB - US 2002/0016759).

Re. Claim 1, Macready discloses a system, method and apparatus, rules identifying strategic selling policies (preferences) and attributes for the product or service to be sold [see entire document particularly, Abstract; Figures 2-3; paragraphs 0002, 0009, 0017, 0056, 0157, 0278-0281, 0297]; and automatically making a decision to sell the product or service to a customer based on the *one or more* rules (preferences) and the *one or more* attributes [paragraphs 0003, 0017]. Macready does not explicitly disclose obtaining *one or more rules or data*. *However obtaining data is well known. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to modify disclosures Macready and include obtaining data to allow the system to be capable to collect data in usable format submitted buy the buyers and sellers.*

Re. Claim 2, Macready discloses wherein the *one or more* rules include *one or more* rules directed to at least *one of* an identification of the types of products or services that are to be sold over a specified period of time, preferred terms and conditions of sale, preferred shipping or delivery policies (variation in *delivery* time as a function of *price*) [paragraph 0034].

Re. Claim 3, Macready discloses wherein the *one or more* attributes includes at least

Art Unit: 3628

*one of* a minimum price to be paid for the product or service, a minimum number of products or services for purchase, sets of products or services that may be offered as substitutes for each other, information about relative valuations or tradeoffs among products or services, information for determining tradeoffs among imperfectly substitutable products or services, information for determining tradeoffs between product or service prices, order size, and delivery times, information for determining tradeoffs between product or service prices and vendor preferences, thresholds for minimum acceptable quality measures [paragraph 0014, 0306].

Re. Claims 4-8, Macready discloses 4. The *method* of claim 1, wherein the product or service is associated with a multi-attribute utility function that describes an interrelation between multiple attributes of the *one or more* attributes, wherein the *one or more* attributes are dynamically set (price), wherein the *one or more* attributes are fixed (colors), wherein at least *one of* the *one or more* attributes is dynamically set and at least *one of* the *one or more* attributes is fixed, and wherein a value of at least *one of* the *one or more* attributes is automatically set (price quote) [paragraph 0007,0014-0017].

Re. Claim 9, Macready wherein automatically making a decision to sell the product or service to a customer includes automatically determining an initial offer of sale for the product or service, automatically providing the initial offer of sale to the customer; and automatically negotiating terms of sale of the product or service based on the initial offer



Art Unit: 3628

of sale, the *one or more* rules and the *one or more* attributes of the product or service [page 26 claims 109, 115; paragraph 0298, 0309].

Re. Claims 12-13, Macready discloses wherein automatically negotiating terms of sale of the product or service includes obtaining exogenous preference information for a customer, and determining acceptable terms of sale based on the exogenous preference information (different utility), wherein the exogenous preference information includes at least *one of* identification of known (preferred color). or previous customers that are preferred, identification of known or previous customers that are to be avoided, rank ordering of customers, and rank ordering of customers to prefer for the product or service [paragraph 0016].

Re. Claim 14, Macready discloses wherein automatically negotiating terms of sale of the product or service includes obtaining information about *one of* the product or service and the customer from a third party and determining acceptable terms of sale based on the obtained information [paragraph 0036, 0138].

Re. Claim 15, Macready discloses wherein negotiating terms of sale of the product or service includes at least *one of* using a price setting *method*, using an automated bidding *method*, and haggling over terms of sale of the product or service [paragraph 0006].

Art Unit: 3628

Re. Claim 16, Macready discloses wherein negotiating terms of sale of the product or service includes negotiating based on *one or more* negotiation parameters including at least *one of* thresholds on minimum acceptable price (whether or not he wants to be above or below that threshold) [paragraph 0306, 0142].

Re. Claim 17, Macready discloses further comprising storing a record of the sale [paragraph 0142].

Re. Claim 18, Macready discloses wherein automatically providing the initial offer of sale to the customer includes updating a on-line catalog listing for the product or service based on the initial offer of sale [paragraph 0007, 0279].

Re. Claim 19, Macready discloses wherein automatically providing the initial offer of sale to the customer includes transmitting the initial offer of sale to the customer prior to the customer requesting the initial offer of sale for the product or service (online catalog) [paragraph 0008, 0279, 0312].

Re. Claim 20, Macready 20. The *method* of claim 1, wherein the *method* is implemented in a distributed data processing *system (internet and coupled to the economic hub serves)* [paragraph 0295-0297, 0303].

Art Unit: 3628

Re. Claim 21, system claim 21 is rejected with same rational as claim 1, system of Macready includes a computer readable medium capable of storing computer instructions of method claimed.

Re. Claim 22, system claim 22 is rejected with same rational as claim 2.

Re. Claim 23, system claim 23 is rejected with same rational as claim 3.

Re. Claim 24, system claim 24 is rejected with same rational as claim 4.

Re. Claim 25, system claim 25 is rejected with same rational as claim 5.

Re. Claim 26, system claim 26 is rejected with same rational as claim 6.

Re. Claim 27, system claim 27 is rejected with same rational as claim 7.

Re. Claim 28, system claim 28 is rejected with same rational as claim 8.

Re. Claim 29, system claim 29 is rejected with same rational as claim 9.

Re. Claim 32, system claim 32 is rejected with same rational as claim 12.

Re. Claim 33, system claim 33 is rejected with same rational as claim 13.

Re. Claim 34, system claim 34 is rejected with same rational as claim 14.

Re. Claim 35, system claim 35 is rejected with same rational as claim 15.

Re. Claim 36, system claim 36 is rejected with same rational as claim 16.

Re. Claim 37, system claim 37 is rejected with same rational as claim 17.

Re. Claim 38, system claim 38 is rejected with same rational as claim 18.

Re. Claim 39, system claim 38 is rejected with same rational as claim 19.

Re. Claim 40, system claim 40 is rejected with same rational as claim 20.

Re. Claim 41, apparatus claim 41 is rejected with same rational as claim 1.

Art Unit: 3628

Re. Claim 42, apparatus claim 42 is rejected with same rational as Claim 9.

Re. Claim 44, apparatus claim 44 is rejected with same rational as claim 12

Re. Claim 45, apparatus claim 45 is rejected with same rational as claim 14.

Re. Claim 46, apparatus claim 46 is rejected with same rational as claim 15.

Re. Claim 47, apparatus claim 47 is rejected with same rational as claim 17.

Re. Claim 48, apparatus claim 48 is rejected with same rational as claim 18.

Re. Claim 49, apparatus claim 49 is rejected with same rational as claim 18.

Claims 10-11, 30-31 and 43 are under 35 U.S.C. 103(a) as being unpatentable over Macready, as applied claims 1, 9, 21, 29-31, 41, 42 above, in view of Kansal (US 6,647,374).

Re. Claims 10-11, Macready does not explicitly disclose obtaining history information regarding the product or service; determining acceptable terms of sale based on the history information, wherein the history information includes at least *one of* production costs for the product or service, prices of similar or competing products or services, current or past sales and income on different products or services, estimates of historical measures of customer demand for the product or service, and customer click stream history. However, Kansal discloses these features [Abstract; C2 L19-L40; C3 L39-L67; C4 L12-L16] to evaluate the reliability, performance and probability of vendor's default for delivery of a product. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to combine disclosures Macready

Art Unit: 3628

and Kansal to provide vendor's historical reliability with respect to other vendors to determine appropriate vendor.

Re. Claim 30, system claim 30 is rejected with same rational as claim 10.

Re. Claim 31, system claim 31 is rejected with same rational as claim 11.

Re. Claim 43, apparatus claim 43 is rejected with same rational as claim 10

### ***Conclusion***

Claims 1-44 and 46-49 are rejected and claim 45 is objected to being improper dependent claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T Dass whose telephone number is 571-272-6793. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3628

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass  
Examiner  
Art Unit 3628

*Harish T Dass*

5/2/05